CLAIMS

1. A method of representing an object appearing in a still or video image, by processing signals corresponding to the image, the method comprising deriving a plurality of numerical values associated with features appearing on the outline of an object starting from an arbitrary point on the outline and applying a predetermined ordering to said values to arrive at a representation of the outline.

2. A method as claimed in claim 1 wherein the predetermined ordering is such that the resulting representation is independent of the starting point on the outline.

3. A method as claimed in claim 1 wherein the numerical values reflect points of inflection on the curve.

4. A method as claimed in claim 1 wherein a curvature scale space representation of the outline is obtained by smoothing the outline in a plurality of stages using a smoothing parameter sigma, resulting in a plurality of outline curves, using values for the maxima and minima of

the curvature of each outline curve to derive curves characteristic of the original outline, and selecting the co-ordinates of peaks of said characteristic curves as said numerical values.

5. A method as claimed in claim 4 wherein the co-ordinates of the characteristic curves correspond to an arc-length parameter of the outline and the smoothing parameter.

6. A method as claimed in claim 5 wherein the peak co-ordinate values are ordered on the basis of the peak height values, corresponding to the smoothing parameter.

7. A method as claimed in ~~any one of claims 1 to 6~~ claim 1 wherein the values are ordered starting from the greatest value.

8. A method as claimed in claim 7 wherein the values are ordered in decreasing size.

9. A method as claimed in ~~any one of claims 1 to 6~~ claim 1 wherein the values are ordered starting from the smallest

value.

10. A method of representing an object appearing in a still or video image, by processing signals corresponding to the image, the method comprising deriving a plurality of numerical values associated with features appearing on the outline of an object to represent said outline and deriving a factor indicating the reliability of said representation using a relationship between at least two of said values.

11. A method as claimed in claim 10 wherein the factor is based on the ratio between two of said values.

12. A method as claimed in claim 11 wherein the ratio is of the two greatest values.

13. A method as claimed in ~~any one of claims 10 to 12~~ claim 10 wherein a curvature scale space representation of the outline is obtained by smoothing the outline in a plurality of stages using a smoothing parameter sigma, resulting in a plurality of outline curves, using values for the maxima and minima of the curvature of each outline curve to derive

curves characteristic of the original outline, and selecting the co-ordinates of peaks of said characteristic curves as said numerical values.

14. A method as claimed in claim 10 wherein said values are derived using a method as claimed in any one of claims 1 to 9.

15. A method of searching for an object in a still or video image by processing signals corresponding to images, the method comprising inputting a query in the form of a two-dimensional outline, deriving a descriptor of said outline using a method as claimed in ~~any one of claims 1 to 9,~~ claim 1 obtaining a descriptor of objects in stored images derived using a method as claimed in ~~any one of claims 1 to 9~~ claim 1 and comparing said query descriptor with each descriptor for a stored object, and selecting and displaying at least one result corresponding to an image containing an object for which the comparison indicates a degree of similarity between the query and said object.

16. A method as claimed in claim 15 wherein a factor is

derived for the query outline and for each stored outline using a method as claimed in ~~any one of claims 10 to 12~~ claim 10, and the comparison is made using the predetermined ordering only or the predetermined ordering and some other ordering depending on said factors.

17. A method of representing a plurality of objects appearing in still or video images, by processing signals corresponding to the images, the method comprising deriving a plurality of numerical values associated with features appearing on the outline of each object and applying the same predetermined ordering to said values for each outline to arrive at a representation of each outline.

18. An apparatus adapted to implement a method as claimed in ~~any one of claims 1 to 17~~ claim 1.

19. A computer program for implementing a method as claimed in ~~any one of claims 1 to 17~~ claim 1.

20. A computer system programmed to operate according to a method as claimed in ~~any one of claims 1 to 17~~ claim 1.

21. A computer-readable storage medium storing computer-executable process steps for implementing a method as claimed in ~~any one of claims 1 to 17~~ claim 1.

22. A method of representing objects in still or video images substantially as hereinbefore described with reference to the accompanying drawings.

23. A method of searching for objects in still or video images substantially as hereinbefore described with reference to the accompanying drawings.

24. A computer system substantially as hereinbefore described with reference to the accompanying drawings.